1	2	3	4	5	6	7	8
23	Sikkim	39.11					39.11
24	Tamil Nadu	89.70	3492.79	215.50	4.25	0.05	3802.29
25	Tripura	16.01					16.01
26	Uttar Pradesh	25.10		121.50	5.00	0.38	151.98
27	Uttaranchal	75.67				0.05	75.72
28	West Bengal	98.40	1.10			0.05	99.55
29	Andaman & Nicobar	5.25				0.10	5.35
30	Chandigarh						
31	Dadar & Nagar Haveli						
32	Daman & Diu						
33	Delhi						
34	Lakshadweep					0.76	0.76
35	Pondicherry					0.03	0.03
	Others	17.48	3.20			0.79	21.47
	Total (MW)	1975.60	7093.99	1140.63	43.45	2.12	10255.79

MW = megawatt

Contribution of NEW and RENEWABLE ENERGY SOURCES

394. DR. GYAN PRAKASH PILANIA :
SHRI LALIT KISHORE CHATURVEDI:

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the percentage of contribution of the New and Renewable Energy to total power generation in the country / Rajasthan; source-wise;

(b) whethcr the targets of generating electricity from renewable sources during the last three years have been achieved in the country / Rajasthan;

(c) the potenrial of new and renewable energy in Rajasthan source-wise;

(d) the potential of solar energy in Rajasthan and how much solar energy has actually been generated so far, year-wise during the last three years;

(e) whether third generation solar energy technology is in use in Rajasthan; and

(f) the steps taken by Government to promote electricity generation from renewable sources?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH) : (a) A cumulative grid-interactive power generation installed capacity of around 15,538 MW from various renewable energy sources mainly wind, small hydro, biomass and solar energy has been set up in the country as on 31.10.2009 as per the following source-wise break-up:

Wind Power:	10,891 MW
Small Hydro Power:	2,520 MW
Biomass Power :	816 MW
Bagasse cogeneration:	1,241 MW
Urban/ Industrial Waste to Power:	67 MW
Solar power:	3 MW
	15,538 MW

The above capacity corresponds to over 9 per cent of the total power generation installed capacity from all sources in the country. Out of this a capacity of around 792 MW (comprising of 23.85 MW Small hydro power, 735.40 MW wind power, 31.30 MW Biomass power and 0.15 MW Solar power) has been set up in Rajasthan.

(b) Yes, Sir. Around 6,367 MW grid-interactive renewable power generation capacity has been added during the last three years in the country against a target of 5,949 MW as under:

	Target	Achievement
2006-07	1,385 MW	2,138 MW
2007-08	1,987 MW	2,146 MW
2008-09	2,577 MW	2,083 MW
	5,949 MW	6,367 MW

State-wise targets are not fixed. However, a capacity of around 396 MW capacity (380 MW wind power and 16 MW biomass power) was set up in Rajasthan during the period.

(c) 5400 MW from wind, 63 MW from small hydro, 10 MW from biomass power and 62 MW from waste to energy have been estimated for grid-interactive renewable power generation capacity in Rajasthan.

(d) Rajasthan receives solar radiation in the range of 5.5 to 6.8 kWh per sq. m. On average about 35 MW capacity solar plant can be installed on I sq. km. land area in Rajasthan. 2 no. grid connected solar power plants of 150 kWp capacity are installed in Rajasthan, which are expected to generate about 0.25 million units/ annum. During the last three years no new grid connected solar power plant has been set up in the State.

(e) So far, no grid connected solar PV power plant, based on third generation solar PV technologies, has been installed in Rajasthan.

(f) The Government is promoting renewable power generation through a mix of fiscal and financial incentives and other policy/regulatory measures. These include capital/ interest subsidy, accelerated depreciation and nil/ concessional excise and customs duties. Under the Electricity Act 2003, it has been made obligatory upon State Electricity Regulatory Authorities to fix a minimum percentage for purchase of electricity from renewable sources taking into account local factors. Preferential tariff for grid interactive renewable power is being given in most potential States following the provisions made under the National Electricity Policy 2005 and National Tariff Policy 2006. Uniform guidelines by CERC for fixation of such preferential tariffs have been issued recently. Generation Based Incentives Scheme on a pilot basis for Solar Power have also been introduced to attract private investment by Independent Power Producers not availing Accelerated Depreciation benefit.

Mega solar energy initiative

395. SHRI VIJAY JAWAHARLAL DARDA:
DR. T. SUBBARAMI REDDY:

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether after having approved a mega solar energy initiative, Government is planning to give a major thrust to overall renewable energy as it was way for the future and would go a long way in meeting Indiaus energy needs in addition to reducing environmental hazards;

(b) whether the Ministry had declared to launch a solar mission programme across the country from November 14; and

(c) if so, the details thereof and the steps being taken to implement policy for launching solar mission programme?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH) : (a) to (c) The Ministry of New and Renewable Energy has set a target to install 14,000 MW capacity renewable energy based grid power generation plants during the 11th plan period in the country.

Government has also approved Jawaharlal Nehru National Solar Mission to develop solar energy technologies to make solar power competitive to conventional grid power. The Mission aims at setting up of 20,000 MW grid solar power and 2,000 MW of off-grid solar power including 20 million solar lights. In addition, it aims at installation of 20 million square metre solar thermal collector area by 2022. The Mission will be implemented in three phases. Government has approved the target to set up 1,100 MW grid connected solar plants and 200 MW capacity equivalent off-grid solar applications in the first phase of the Mission, till 2012-13.

In addition, the Mission will also support research and development to reduce cost, improve efficiency and overall performance of solar energy systems and also for development of new materials and devices.